

REVIEW OF THE HEINLE PICTURE DICTIONARY – INTERACTIVE CD-ROM

Title	The Heinle Picture Dictionary – Interactive CD-ROM
Platform	Windows® 98, ME, 2000, XP Mac OS® 9.1 or later, Mac OS X
Minimum hardware requirements	64 MB of RAM (128 recommended) 400 MB available on hard disk space 800 x 600, 16-bit color display (minimum) 1024 x 768 recommended Sound Card Speakers or headphones Microphone CD-ROM Drive
Software requirements	QuickTime version 6.0 or later (included on the CD-ROM)
Publisher	Thomson Heinle The Thomson Corporation Website: http://elt.thomson.com Phone: (800) 423-0563 Fax: (859) 647-5045
Support offered	(1) 16-page 'Getting Started' guide (2) Website: http://elt.thomson.com (3) E-mail: tl.support@thomson.com (4) Phone: (800) 423-0563
Target language	English
Target audience	High Beginner or Intermediate, young or adult ESL learner
Price	US \$46.67 (List Price)
Publication Year	2005
ISBN	0838444105

Review by [Walcir Cardoso](#), Concordia University

Dictionary use is unquestionably one of the most popular strategies used by ESL learners to learn vocabulary (e.g., Schmitt, 1997). Despite being ostracized by many language teachers because of its inability to promote the use of context clues for guessing the meaning of unknown words (Folse, 2004), dictionary use has proven to be beneficial to L2 vocabulary acquisition (e.g., Hulstijn, Hollander & Greidanus, 1996), especially when combined with other learning strategies. Informed by current research on L2 vocabulary acquisition, as will be shown in the forthcoming discussion, Thomson Heinle introduces its *Heinle Picture Dictionary – Interactive CD-ROM*, which, unlike most dictionaries, presents vocabulary in oral and written contexts, organized by thematic units and specific topics. In addition, it attempts to promote learner independence by offering students a chance to engage in active learning via a variety of decision-making activities. The dictionary incorporates the four language skills under the assumption that to know a word involves much more than just knowing its meaning (Nation, 1990): reading (via "Words in Context" and "Reading" activities), listening (via the audio version of all words and texts in the dictionary and listening activities), writing (via "Dictation" and "Spelling"), and speaking (via "Recording"). Despite some of the shortcomings (e.g., the ineffective "Recording" activity), the *Heinle Picture Dictionary – Interactive CD-ROM* constitutes an outstanding tool to increase ESL students' vocabulary, as has been recognized by its nomination for the 2006 Codie Awards, in the "Best Instructional Solution: English Language Acquisition" category.

The *Picture Dictionary – Interactive CD-ROM* is targeted at both young and adult ESL learners from proficiency levels that range from high-beginner to intermediate. It consists of 16 thematic units (e.g., Basic Words, School, Family – see Figure 1), each divided into interrelated topics that focus on everyday themes, such as the weather, restaurants, health, and housing. The number of topics in each unit varies from three to eleven, with an average of 40 new lexical items per topic (well within Nation's (1990) recommendation for learning vocabulary via word lists: "well over 30 [...] per hour" (p. 126)), for a total of over 4,000 words on the CD, or approximately 250 words per unit. There is no logical sequence in the organization of the units: the levels of word difficulty (e.g., based on frequency, morphological complexity) and syntactic complexity (e.g., the use of longer, subordinate sentences) are relatively similar across the 16 units, allowing users to select the appropriate topic based exclusively on their vocabulary needs, not their knowledge of English morphology or syntax.

Once the CD-ROM is loaded and installed on a computer, the user can create a shortcut on the Desktop. To start using the Dictionary, the user clicks on the shortcut after which s/he is asked to register with a user name and password. This process assigns the user a unique account and personal files that are stored on the computer's hard drive and allows teachers to monitor students' progress. After registration and subsequent login, the user is prompted with the *Picture Dictionary's* main interface: a list of all the thematic units, as illustrated in Figure 1.



Figure 1. Thematic units and topics in Heinle's *Picture Dictionary – Interactive CD-ROM*

By clicking on one of the units in Figure 1, the user is prompted with a series of topics, as illustrated in the menu options under the "People" unit. Figure 2 illustrates a sample interface for a sub-topic, "Documents," under the "Explore" tab of the "People" unit. For illustration, in Figure 2, all the tools

available in the "Explore" tab are displayed: "Words in Context", "Word Partnership", "Dictionary" and "Recording," which constitute independent windows that can be moved around within the CD-ROM interface. To explore words within the main picture in the background, in this case an assortment of different types of documents and the relevant vocabulary associated with that environment, the user clicks on the white circle near an image (e.g., the image for "a driver's license" in [Figure 2](#)). The word and its respective image (repeated from the main background) then appear in the box below the main picture. To hear the word pronounced (in North American English), the user clicks on the speaker icon to the left of the word.



Figure 2. A sample topic and available tools

The *Words in Context* tool allows the user to encounter words in context via written texts and their spoken counterparts. The recording of the text (short passages specifically written for the CD in slightly simplified language – see "Words in Context" in Figure 2) can be paused, slowed down, speeded up just like on a standard CD player. Through the *Word Partnerships* tool, a list of relevant words is shown with a set of potential collocations or "partners" (see Figure 2) that need to be matched. If the choice between a given word and its collocate (or word partner) is correct (e.g., "apply for" is matched with "a green card"), a voice will read the complete collocation. If, on the other hand, the choice is incorrect (e.g., "apply for" is matched with "your name"), nothing will happen, indicating that the attempt was not successful.

The *Dictionary* is the most important feature on the CD-ROM and is the tool that learners use to navigate the *Picture Dictionary* and locate words or collocations within their cover topics or thematic units. To use the *Dictionary*, students type in a word or collocation into one of the four search options: (1) within the entire dictionary (All Words), which allows users to search beyond the boundaries of the topic, as illustrated in Figure 2 for the collocation "mow the lawn"; (2) within the topic being studied (Current Topic); (3) within the words that have previously been accessed by the user (My Words), which allows the user to revisit and thus retrieve vocabulary already studied; and finally, (4) within the words searched or studied that same day (Today's Words). When a given word or collocation is selected, the program shows a smaller version of the image and a sound icon beside the word in the lower part of the Dictionary window, as illustrated for the collocation "a driver's license" in Figure 2. The user can then hear the words' pronunciation by clicking on the respective icon, or go to the topic in which the original word appears by clicking on the Go button.

With the *Recording* tool, the user may record words, sentences or passages and play back the recording for a pronunciation check or merely to practice the pronunciation of new words (see the discussion of this feature below).

Each topic (e.g., "Documents" in Figure 2) is comprised of a set of six activities, which can be accessed via the tab in the upper right hand corner of the topic window, suitably named Flashcards, Matching, Spelling, Word Search, Reading, and Dictation, reminiscent of many traditional vocabulary activities. These activities, or games, constitute an important component of the *Dictionary*, since they promote the retrieval and reuse of the vocabulary to which learners have been exposed in that particular topic (e.g., involving documents). The Activities interface and a brief description of each of these types of activities are illustrated in Figure 3 and Table 1, respectively.



Figure 3. A sample topic and its six accompanying activities

Table 1. Activities in the *Heinle Picture Dictionary*'s CD-ROM

Activity	Description
Flashcards	An activity inspired by the concept of vocabulary notebooks, a learning strategy considered to have a positive effect in (deliberate) vocabulary learning (e.g., Schmitt & Schmitt, 1995; Folse, 2004). It recalls, recycles and organizes word knowledge (e.g., in semantic networks), and can be used as a learner-centered assessment tool. In the activity, the user is shown a card-like window with two display options for a given word: (1) its picture or (2) its orthographic form and corresponding pronunciation. The user can decide which of the two options should appear first as well as whether the words should be arranged randomly to avoid the effect of memorization. Words can be removed from the list (e.g., if they have already been learned) or added to the list (e.g., if the learner realizes that s/he needs further exposure to the word).
Matching	A matching game. The player clicks on a box which reveals a word or a picture. The user must then find the matching word or picture that is hidden behind another box on the grid. As words and pictures are paired, the game gradually exposes a background that is similar to the one used in the Explore window. This activity relies on memorizing strategies.
Spelling	This is a variant of the hangman game, except that in the <i>Dictionary</i> the man is replaced by a car. In the game, the player is challenged to guess the letters of the word shown in a given picture by clicking on the appropriate letters. If the selected letter is correct, the letter is added to its corresponding position in the word; every incorrect guess, on the other hand, removes a piece of the car. If the word is not guessed within seven tries, the car falls apart and the correct word is displayed. In this activity, the user has the option of listening to the pronunciation of the word at any time.
Word Search	In this word search game, the user is shown a list of words that need to be found among a jumble of letters in a grid. Optionally, the picture for each item is also available to the user by clicking on the desired word.
Reading	A revised version of the cloze test in which the learner completes the blanks of a text (the same one as used in "Words in Context"). There are two levels of difficulty: Level 1, in which the words missing are provided on a list, and Level 2, in which the words have to be typed in by the user. After completion, the <i>Dictionary</i> provides feedback by indicating the number of correct and incorrect words.
Dictation	An updated version of the traditional dictation activity. The user is shown a text window with icons similar to those in a standard CD player. The user listens to the text (the same one as used in "Words in Context") and types in the passage. The recording can be played, paused, or stopped like on a CD player, and slowed down or speeded up to change the rate at which the sound is played.. At the end of the activity, the user can print the text entered (for example, to hand it in as a homework assignment), save it (in which case it is saved as a text document in the <i>Picture Dictionary</i> 's directory on the computer's hard drive, under the "Dictation" sub-directory), or simply reset the application to start the dictation over.

The *Picture Dictionary* also contains a teacher class management tool that allows instructors to manage groups of students using the CD-ROM. A teacher can create and edit students' accounts, create classes, and view and print students' progress reports containing the topics consulted, the words accessed with the respective dates and times of access, the type of activity performed (e.g., Dictation, Explore), and the progress within each activity (see Figure 4). The instructor can also view and print a list containing all the words and collocations accessed by the students, as illustrated in Figure 5. The information is available to both the teacher and the student.

<div> Help Quit Login </div>				
Student Progress Report				
Student Name: walcir Cardoso		walcir Cardoso		
Date	Topic	Activity	Round	Progress (Total)
24/06/2006 12:11 PM	Classroom	Reading		3 of 8
24/06/2006 12:13 PM	Classroom	Spelling		0 of 1
24/06/2006 12:14 PM	Classroom	Spelling		0 of 0
24/06/2006 12:16 PM	Classroom	Flashcards		Viewed
24/06/2006 12:16 PM	Classroom	Spelling		0 of 0
24/06/2006 12:17 PM	Classroom	Explore		
24/06/2006 12:19 PM	Classroom	Explore		
24/06/2006 12:19 PM	The Human Body	Explore		
24/06/2006 12:20 PM	The Human Body	Spelling		0 of 0
24/06/2006 12:21 PM	The Human Body	Flashcards		Viewed
24/06/2006 12:22 PM	The Human Body	Explore		
24/06/2006 2:18 PM		START		
24/06/2006 2:18 PM	Science	Explore		
24/06/2006 2:20 PM	Office	Explore		
24/06/2006 2:20 PM	Hotel	Explore		
24/06/2006 2:21 PM	Types of Homes	Explore		
24/06/2006 2:22 PM	Types of Homes	Explore		
24/06/2006 2:22 PM	Public Transportation	Explore		
24/06/2006 2:23 PM	Soap, Comb, and Floss	Explore		
24/06/2006 2:28 PM	Types of Homes	Explore		
24/06/2006 2:35 PM		START		
24/06/2006 2:35 PM	Classroom	Explore		
24/06/2006 2:44 PM	Classroom	START		
24/06/2006 2:44 PM	Classroom	Explore		
Print Report See Words Explored See Class Management Page				

Figure 4. Student Progress Report – teacher's view

Student Name: walcir Cardoso

walcir Cardoso

Topic	Words
Classroom	classroom, bulletin boards, students', chalk, globe, bulletin board, blackboard eraser, alphabet, homework assignment, workbook, flag, blackboard, board, eraser, take a test, table, pass a test, pencil, clock, study for a test, map
Clothes	dress, coat, T-shirt, pants, gown, sweatpants, overalls, shorts, shawl, business suit, shirt, vest, blue jeans, skirt, sweatshirt, jacket, windbreaker, uniform, tuxedo, maternity dress, sari, trench coat, pullover, scarf, sports jacket, raincoat, blouse, poncho, hat, tie
Daycare Center	bib
Hotel	concierge, desk clerk, luggage cart, bellhop, revolving door, lobby, business center, swimming pool, fitness center
In, On, Under	above, over
Indoor Sports and Fitness...	bench
Numbers	zero
Office	computer, photocopier, copy machine, paper shredder
Public Transportation...	conductor, ticket window, passenger, taxi driver, cab driver, taxi, cab, taxi stand, fare, platform, token, fare card, subway train, track, train
Rain Forest	aardvark, tiger, orangutan, flamingo, chimpanzee, parrot
School	absence note, guidance counselor, permission slip, teacher's lounge, restroom, bathroom, water fountain
Science	formula, magnifying glass, test tube, forceps, biologist, physics, physicist, chemist, chemistry, beaker, flask, graduated cylinder, molecule, atom, microscope, petri dish,

[Print Report](#)[See Progress Report](#)[See Class Management Page](#)

Figure 5. List of Words Explored – teacher's view

The *Heinle Picture Dictionary* provides a number of supplementary options. These include the paper version of the Picture Dictionary, a comprehensive Lesson Planner for teachers with 114 fully developed lesson plans, and an Activity Bank CD-ROM, which contains reproducible activity masters that can be customized for classroom use. However, these supplements were not the focus of the present review.

In general, the *Heinle Picture Dictionary – Interactive CD-ROM* provides students and teachers with valuable tools to assist in the learning and teaching of vocabulary. The thematic units and activities seem to have been carefully selected to accommodate a variety of topics associated with the North American life style and designed according to current research on vocabulary acquisition. One of the important and most innovative aspects is the inclusion of *Word Partnerships* and *Words in Context*, two tools reflecting the hypothesis that words are better learned in context and with the collocates with which they are naturally associated and occur most frequently (e.g., Taylor, 1983; Nation, 1990).

In addition, the *Picture Dictionary* includes a variety of activities that encourage extensive and varied exposure to words being learned, as suggested by Nation (1990) and Coady (1993). Learners have a number of opportunities to retrieve and recycle new words via their written, oral, and visual representations in activities such as *Explore* (in which words are visually presented within a larger context – see [Figure 2](#)), *Words in Context*, *Word Partnerships*, *Dictionary*, and the six activities *Flashcards*, *Word Search*, *Matching*, *Reading*, *Spelling*, and *Dictation*, all of which involve different degrees of memorizing strategies. In these activities, learners engage in recycling words via reading, listening and, to a lesser extent, via speaking and writing, thus providing varied opportunities for learning to take place. Such an approach reflects Nation's (1990; 2001) and Thornbury's (2002) view that systematic repetition of new words is more likely to trigger their storage in long-term memory.

Another positive aspect of the *Picture Dictionary* is its promotion of learner autonomy, which has been shown to be an important predictor of successful vocabulary learning (Oxford, 1990; Sokmen, 1997). In most of the activities, learners are involved in decision-making tasks, such as deciding how often a word should be revisited (e.g., in *Flashcards*, students may remove or add words to the activity), the type of vocabulary exposure (i.e., visual, orthographic, and/or oral), and where to go within the different topics in the dictionary (via the "Dictionary" tool that displays the entire inventory of more than 4,000 words). The *Picture Dictionary* also allows students to monitor their learning by keeping track of all the words consulted on a given day or in general. For feedback purposes, this information (including data from *Dictation* activities) is shared with teachers, a feature that can also be explored for research purposes (e.g., to find out whether the students' involvement in the use of the *Picture Dictionary* has an effect on their acquisition of vocabulary).

One of the most important features of a picture-based dictionary is the quality of its images. In general, the images in the *Dictionary* are of good quality and typically depict items in a recognizable fashion (but see a critique of this feature below) via the use of real life photos (see [Figure 2](#) above for a sample of these), and both color and black-and-white drawings. It is not clear what criteria were adopted for the selection of one type of image over the other, but a considerable amount of the images are color drawings, as illustrated by the image for the collocation "mow the lawn" in [Figure 2](#).

The interface of the *Picture Dictionary* is in line with the current view on web design that regards the interface as an *element* of content, not merely a *conduit* to content (e.g., Rokeby, 1997). It is elegantly designed and provides easy navigation to all the tools and activities available to the user. The only incongruity (for PC users) might be the Mac-style location of the "close" box at the top left side of the windows, and the fact that a click on the higher or lower area of the scroll bar does not display the subsequent page, as is standard in computer applications; instead, the words corresponding to that particular section of the dictionary are displayed. Finally, the *Picture Dictionary* provides one of the most visually appealing and easy to use "Help" functions. By clicking on the "Help" icon (sometimes represented by a question mark) of any window or application, the reader is directed to a replication of

that window or application, with callouts that clearly indicate the function of each menu, button or icon illustrated.

However, the *Heinle Picture Dictionary –Interactive CD-ROM* also has some shortcomings that could be addressed in its future incarnations. First and foremost, the *Recording* feature is not well conceived. The quality of the recording is low and, more importantly, it does not provide any objective feedback to the learner. Research has shown that the feedback provided by the visualization of speech (e.g., via waveforms, spectral and pitch analyses) can be quite beneficial to learning L2 pronunciation (Hardison, 2004) in that it allows learners to compare a visual image of their language production with that of a native speaker model. If knowing a word involves knowing how it is pronounced, more importance should be given to this feature that characterizes word knowledge.

A point perceived as a shortcoming might be the fact that the *Picture Dictionary* provides neither definitions (as is the case in traditional dictionaries) nor translations of words or collocations. This is particularly important in cases of words whose pictures are not indicative of their meanings (e.g., "vault", "take a break", "plains"). Even though these two features would extend beyond what is expected of a *picture* dictionary, it would be beneficial to the learner to be provided with additional (in this case, more conventional) learning strategies. The more techniques or strategies a learner uses to learn new vocabulary, including translations and reading word definitions, the more likely it is for learning to take place (e.g., Gairns & Redman, 1986; Thornbury, 2002). In addition, research shows that the use of bilingual dictionaries (usually frowned upon by many language teachers) does seem to have a positive effect on vocabulary acquisition (e.g., Prince, 1995; Folse, 2004). One of the limitations of incorporating bilingual or multilingual glosses into the dictionary, however, is that it would require different versions of the CD based on the learners' first language, as is the case with traditional (i.e., non-picture based) dictionaries.

Finally, some of the minor problems encountered are the following: (1) the pronunciation of certain vowel-initial words does not sound natural when they are preceded by the determiner "an"—these words are sometimes pronounced on the CD with an epenthetic glottal stop [ʔ], a sound that is usually perceived as pause by native English speakers (e.g., "an ʔigloo", "an ʔice-pack"), and thus the pronunciation sounds unnatural; (2) the word "urban area" is misspelled as "urbarea" in the *Dictionary* application; (3) the *Word Partnerships* application does not recognize some correct collocations in both the text and its oral reproduction (e.g., "drive a bus", "a science-fiction book"), a fact that could have a negative effect in vocabulary acquisition as learners will interpret these collocations as incorrect; (4) the "Help" function for *Recording* explains that to stop a recording, users should click on the "stop" button when, in fact, they should re-click on the "record" button. Obviously, some of these limitations can be overcome via the teacher's intervention (e.g., telling students that "drive a bus" is an appropriate collocation in English).

Despite these limitations, the *Heinle Picture Dictionary –Interactive CD-ROM* is an excellent tool to assist in the teaching and learning of vocabulary in a computer-assisted environment. It provides the learner with a wide range of learning opportunities in a setting that is varied, challenging (but not threatening), fun, and visually appealing. If the features encountered in the *Picture Dictionary –Interactive CD-ROM* are an indication of where learner dictionary design is heading, what an exciting time to be a language learner or teacher!

ABOUT THE REVIEWER

Walcir Cardoso (Ph.D., McGill University) is an Assistant Professor at the TESL Centre of the Department of Education at Concordia University. His main research interest is to explore how insights from phonology can be applied to the teaching of second language pronunciation in traditional and computer-assisted classroom environments.

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